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THE ROLE OF DIGITAL VISUAL LITERACY IN MODERN MEDIA OF AZERBAIJAN

Almaz Nasibova,

*Ph.D, Doctorate Student at the Department of Multimedia and Electronic Communication,
Azerbaijan Television and Radio Broadcasting CJSC
(Baku, Azerbaijan)*

ORCID ID: 0009-0008-8731-5625

Abstract. This research is dedicated to the dominance of digital visual literacy in modern media, how it is used, and the problems associated with it. The study primarily highlights the mistakes made by journalists and media organizations in relation to visual literacy and offers solutions to these issues. The analysis shows that digital visual literacy is not just a skill, meanwhile it is a necessity in the digital age. It enables individuals to engage with the visual world of modern media in a critical, creative, and responsible manner. As technology evolves, digital visual literacy also develops and emerges in various forms. Today, as the media faces an overwhelming flow of information, it encounters more visual content than plain text. Therefore, verifying and analyzing the authenticity of this visual content has become one of the most crucial responsibilities of journalists. Otherwise, media ethics are compromised, and society receives false information. Media outlets must also know how to use the tools related to digital visual literacy, which are constantly evolving. Azerbaijani media is somewhat lagging in this area, mostly due to financial constraints. In short, this study outlines the problems and proposes solutions, while also providing examples from both local and international media cases.

Key words: Digital Visual Literacy, Visual Manipulation, Infographics, Media Literacy, Critical Thinking, Visual Communication, Technological Skills.

Introduction. In the 21st century, during a period of rapid development in Information Technologies (IT), journalism is no longer limited to text-based news reporting – it increasingly prioritizes visual content to attract audiences and convey stories. This is because audiences tend to prefer information that is more accessible, easier to understand, and quicker to consume. As a result, in today's world, all types of audiences give greater preference to digital visuals, which brings two key aspects to the forefront: accessible news and aesthetic visuals. In short, digital visual literacy (DVL) is considered one of the most crucial requirements of our time.

Speaking on the importance of visual literacy, renowned director Martin Scorsese emphasizes that visuality does not mean the same perception for everyone. Sharon Grey, a storytelling and marketing expert from West Africa, shared on her LinkedIn profile that she first encountered the term “visual literacy” while watching a two-hour filmmaking masterclass by Martin Scorsese. She notes that for anyone involved in brand communication and aiming to influence, visual literacy, much like language and its dialects has its own nuances.

Visual literacy is based on the idea that images can be ‘read,’ and that meaning can be derived through the process of reading. If, as communication professionals, we can analyze and understand the principles of design, only then can we achieve the main purpose of communication can be called mutual impact (Grey, 2020).

Unlike textual literacy, digital visual literacy refers to the ability to both create and interpret visual materials. and for this reason, innate talent plays a significant role. Today, it would not be wrong to say that digital visual literacy stands at the forefront of the major challenges facing modern journalism. Two essential skills lie at the heart of this challenge:

Visual reading skills

Critical thinking skills

If individuals working in any field of society are expected to improve and adopt the right approach in this area, then those who work directly with information, namely, journalists must be professionals without exception. Otherwise, the content they produce will be ignored, and as a result, they will either lose their audience or mislead them. In both cases, the damage will be felt not only by journalism but also by society; both today and in the future.

Digital Visual Literacy (DVL) for journalists and media professionals refers to the ability to create, analyze, and critique visual elements such as images, videos, infographics, and interactive media. This skill is essential not only for producing high-quality content but also for upholding journalistic ethics and integrity in an era of digital manipulation and disinformation.

Journalists with strong DVL skills can enhance storytelling, inform audiences more effectively, and help withstand the ethical challenges posed by digital media.

Digital Visual Literacy (DVL) is the ability to:

- Critically interpret visual content in digital environments,
- Create visual content,
- Evaluate visual content.

(Hochstrasser, n.d.) In modern mass communications, DVL enables individuals and media professionals to understand the complexity of visual communication, uphold ethical standards, and engage effectively with their audiences (Hochstrasser, n.d.).

Key Requirements of Digital Visual Literacy (DVL):

- Effectively convey visual messages and communicate clearly,
- Create clear and impactful visual content,
- Critically read, understand, and analyze information and messages presented in visual and digital texts,

Develop presentations that express visual messages, with the ability to choose and design them based on appropriate presentation methods.

Discussion.

How to detect manipulated visuals?

The rise and development of digital media not only bring benefits and positive outcomes but also lead to the emergence of various challenges and manipulations. In general, manipulated, misleading, or fake visuals can be found not only on social media platforms but also in traditional media. In a world where digital tools and videos can be easily altered, developing Digital Visual Literacy (DVL) is essential; both for media professionals and the public to critically evaluate the authenticity of visual content.

Digital media refers to "digitized content that can be transmitted over the internet or computer networks" (Sikarwar, 2016). Examples of digital media that have emerged in recent years include TV shows and movies available for streaming, radio programs distributed via podcasts, and books converted for e-reader access. Similar to traditional media, digital media serve as communication tools, but unlike the one-way communication of the past, they now facilitate interactions and exchanges between individuals and groups, online collaboration, and the creation of synergies that improve access to resources and services.

Commence to manipulation, in fact, is not something exclusive to the digital era or modern technologies, and it would be incorrect to view it as a recent innovation. History shows that manipulation has existed since the early days of photography and video. For instance, in the 20th century, manipulation became a tool of power, with many regimes using it to erase opponents from history. However, manipulation still exists today, from online scams to traditional mainstream media, appearing in many different forms. Detecting whether a digital visual has been manipulated is not always easy, even professional media outlets sometimes fall victim to deception and make mistakes.

Visual disinformation should be mentioned as well. (Messaris, 1994) Since the release of Vance Packard's *The Hidden Persuaders* (1957), discussions about advertising have often been shaped as a defensive response to advanced, scientifically developed methods intended to remain unnoticed. This perspective on visual persuasion is commonly found in mass-market publications, though it also appears in academic studies of advertising practices. Central to arguments based on this approach is the topic of subliminal persuasion, which is widely regarded as the classic example of how the public understands visual manipulation.

It should be noted that, Stalin, Hitler, Mussolini, Castro, Brezhnev, and many other dictators manipulated photographs related to themselves. Dr. Hany Farid, a specialist from the U.S.-based company FourAndSix, has presented various pieces of evidence on this topic. In particular, Joseph Stalin was especially prone to using this technique; erasing the victims of his political purges from the history of the Soviet Union.

The photo below is presented under the title "Stalin Erases Yezhov." In the first image (the original) Yezhov is present, while in the second, he is absent. The second image is a manipulated, doctored photograph.



Fig 1. Stalin purges Yezhov

Source: Pearce, A. (2016, September 26).

According to Weikmann and Lecheler (2023) another key concern with visual disinformation lies in its ease of circulation. Fake news stories are already known to spread widely on social media, which acts as their main distribution channel. They often attract significant engagement, particularly on Facebook, where they are repeatedly liked and shared, sometimes even surpassing genuine news in popularity. This tendency is likely even stronger with visual disinformation, since visuals generally draw more attention and interaction; for example, tweets containing images receive more clicks, likes, and retweets. Building on this, researchers argue that social media provide fertile ground for deepfakes and decontextualized visuals, as such content can be quickly spread to large audiences and may even influence mainstream media coverage. The core issue is that visual disinformation often circulates because it is difficult to detect and is therefore mistaken for authentic content. Overall, increased engagement on social media emerges as one of the primary consequences of visual disinformation for citizens.

Another example is the pair of images titled "Time Alters O.J. Simpson's Mugshot." These photos are considered one of the most well-known cases of modern visual manipulation, where Time magazine darkened the mugshot of O.J. Simpson (right), who at the time was accused of murder, and later had to issue an apology. James Gaines, the editor of Time at the time, explained the darkening of the image by saying that the photo had been "subtly shaped" and turned into a symbol of tragedy, and insisted that no other meaning should be inferred.

However, critics accused Time of racism over the darkened image. In contrast, Newsweek published the unaltered version of the same photo that same week, making the difference even more striking.



Fig. 2. Time alters OJ Simpson's mugshot

Source: Pearce, A. (2016, September 26).

Digital Visual Literacy (DVL) helps identify signs of digital manipulation, such as distorted images and videos, which, in turn, protects journalists, consumers, and the public from being misled by false information. On another level, understanding the consequences of using altered or distorted images, including video content, in any news report is crucial for upholding journalistic ethics and fostering public trust.

When it comes to interactive and multimedia-based approaches in media consumption, it should be noted that DVL plays a vital role in both the development and use of interactive content. This includes interactive maps, timelines, and data visualizations.

Ayten Abdulova, Chief Editor of Economic News at the Azerbaijan Television and Radio Broadcasting CJSC (AZTV), explains digital visualization as follows: "Data visualization is the graphical representation of information. That's why various infographics, diagrams, and maps are used. In short, data visualization enables a concise analysis of complex information without the need for long sentences."

Ayten Abdulova notes that they try to use infographics as much as possible in their daily news broadcasts and emphasizes its importance. This is because delivering news to the audience visually as well helps ensure that the content is remembered in greater detail.

Regarding the lack of infographics in most video reports, the chief editor explains:

"Presenting news with infographics takes more time compared to preparing a regular news segment. That's because we don't just transfer the news onto a sheet and display it as an image, we have to present the statistics visually in such a way that even if the viewer mutes the television, they can still understand what the story is about. Naturally, preparing that takes time."

She also points out that the Economics News team needs professional graphic designers, but such specialists are scarce in television, a problem the media representative attributes to financial constraints. Professional graphic designers often demand high salaries, which local TV stations struggle to afford.

Overall, the use of multimedia and infographic elements makes news content more memorable. It is also important for capturing the audience's attention and helping them absorb information more quickly.

Niyam Shirinov, Head of the Marketing Department at Report News Agency (Report.az), describes digital visuality as one of the key elements in presenting news content to readers and viewers in a clearer and more engaging way:

"Through our minimalist and corporate visual style, we aim to present news in a comprehensible and informative manner. In addition, digital visuality strengthens Report.az's brand identity. Having a unified visual style for our materials helps viewers become familiar with us more quickly and makes our content easier to recognize."

The Report.az multimedia team uses infographics and visual elements in its broadcast materials. This approach particularly helps present complex data, statistical indicators, or chronological events in a more understandable format for the audience. The multimedia team at Report.az consists of nearly 30 staff members, including designers, video editors, social media specialists, photographers, photo editors, editors, and reporters who work on infographics, video news, and other multimedia content.

The goal is to leverage the power of visual media to deliver news in a more engaging and easily digestible way. This also helps Report.az reach a broader audience on digital platforms.

As an eventual thought, it should be mentioned that over the past twenty years, research interest in virtual face manipulation has grown significantly. Among the early contributions, introduced Video Rewrite, an image-based technique designed to automatically generate new videos of a person with synthesized mouth movements. Similarly, Dale developed Video Face Replacement, one of the first automatic face-swapping methods, which reconstructs 3D models of two faces from single-camera videos and uses their geometric correspondence to map the source face onto the target. Building on this, Garrido created a system that replaces an actor's face while maintaining the original facial expressions. Another approach, VDub, applies advanced 3D face capture methods to realistically modify an actor's face so that it aligns with the mouth movements of a dubber (Rössler et al., 2019).

In conclusion all these are the strong examples for the modern manipulation techniques. Also, these prove the intensive activity of politicians, social media users and their purpose for themselves.

The Process of Creating Infographics

Infographic is data visualizations that present complex information quickly and clearly. Data visualization includes signs, photos, maps, graphics and charts, it presents complex data. The infographic is part of data visualization. The foundation of infographics is composed of three major parts. They are Visual, Content and Knowledge. Visual representations of data, information, and/or knowledge are:

Visual elements – colors, graphics, signs, icons, maps, etc.

Content elements –facts, statistics, texts, references, time frames, etc.

Knowledge –conclusion to express the stories or messages.

The infographic design is very significant. The designing process of infographic can help understand and implement the principles of the designs better than designing the web or documents as well. Nevertheless, graphics could fast persuade readers to disregard the article (Siricharoen & Siricharoen, 2015).

Studies show that the utilization of modern technologies in classrooms gives learners the opportunity to learn faster with better function and with more satisfaction from their class attendance. The attraction of infographics seems to be inherent within their nature, since people are drawn to the visualizations, colors, and images of the infographics itself. An infographic can transfer knowledge about a topic faster and more effectively than pure text; however, this condition is depending on the quality and presentation of the infographics (Naparin & Saad, 2017).

Infographics are mainly used in three formats:

1. Reminder posts for notable days (This Day in History) – Special infographics are created for anniversaries, national and international holidays, and historical events.

2. Visual support in video-photo news – Images, graphic elements, and animations are added to videos to make the news more dynamic and visually appealing.

3. Topical news, interesting quotes, and other content displayed with graphics. These can be adapted based on the specific context.

Creating infographics for Report News Agency is not a simple task; it requires time and effort from the editorial team. In particular, accurately visualizing statistical data or complex information demands detailed and careful work.

This process consists of several stages. First, information is collected and analyzed; statistical indicators or the key elements of the news are identified. Then, a design concept is developed. Decisions are made regarding which colors, graphic elements, and fonts will be used, and how the overall visual structure will be built. Finally, the design is executed and edited.

In the context of modern media, Digital Visual Literacy (DVL) enables journalists, content creators, and educators to create engaging experiences that allow audiences to actively explore content. For instance, interactive news websites or data visualizations give users the opportunity to delve deeper into a story, making the content more compelling and memorable.

Experts also identify the following as key components of Digital Visual Literacy:

- Recognizing visual biases, stereotypes, and manipulations in media
- Interpreting meaning by decoding symbols, colors, and design choices
- Understanding cultural and contextual nuances in visual communication
- Ethical awareness, including understanding the ethical implications of creating and sharing visual content, such as issues of privacy, copyright, and consent
- Technological skills, such as using software and platforms for editing, enhancing, and sharing visual content

“A picture is worth a thousand words”, is the familiar phrase. “The human brain is more able to identify and comprehend relationships and patterns if data is encoded into visual forms”.

For Journalism, there is the importance of information visualization which is adding in reporting the believable and trusted means context. As it mentioned “Infographics: Maximum Information in Minimum Space”, this phase explains the main purpose of infographics design which is produced as helpful as they can in order to give as much detailed information as possible and it can save spaces (Siricharoen, 2013).

Eventually, infographics are crucial in achieving the goals mentioned in the prior section, as they effectively communicate intricate information and help achieve specific objectives (Bhat & Alyahya, 2023).

Improvement of RVS Media Literacy

Firstly, Media literacy is the term most commonly used in North America, especially in relationship to media education for youth. Its practice draws heavily on the key concepts, academic traditions, and field tested practices of media educators in Europe, Australia and New Zealand.

The concept of media literacy has long-standing roots in North American education. As early as 1933, Edgar Dale of Ohio State University advocated incorporating audio-visual and non-print media into public school curricula. His Cone of Experience, though later altered and widely misattributed, became a foundational tool for teaching media authenticity and authorship. By the 1960s, scholars and policymakers, including Marshall McLuhan, supported formal media literacy initiatives in Canada. Since then, media literacy has been applied across a wide range of disciplines; including arts, sciences, mathematics, and humanities both in formal and informal educational settings (Tyner, 2009).

(Jacques, 2024) Visual literacy fosters human creativity and innovation, going beyond protection against digital deception. It deepens our understanding of the visual world and honors the preservation of art, literature, and music as essential parts of our shared human heritage (Jacques, 2024).

Rasheva-Yordanova and Planska-Simeonova (2019) emphasize that “Digital Visual Literacy” as the ability to construct meaning from digital visual images. It is the ability to create and interpret computer-based visual materials effectively and has become a key aspect of virtually every field, from the sciences to commerce to communication and entertainment. Digital visual literacy is required in a wide range of tasks, both inside and outside the workplace. Computers have fundamentally changed the nature of visual communication, in part because they enable a powerful abstract encoding of visual images and models for the first time in history. Because visual information is represented mathematically, it can be replicated, modified, and shared in new ways.

In today’s era of rapidly developing digital media, Digital Visual Literacy (DVL) has become a vital element in promoting overall media literacy. Visual media has taken a dominant role in communication, and media literacy (including visual literacy) teaches individuals how to recognize and interpret visual messages. Visually literate media consumers are more equipped to question the reliability and authenticity of the visuals they encounter, especially in the digital space. This contributes to the formation of a more informed audience and helps assess the credibility of media sources.

Digital visuals have a significant impact on public opinion, shape certain social attitudes, and can even influence outcomes. Thus, journalists often search for photos, videos, or even infographics on the internet to match the stories, investigations, or analytical articles they publish. The visual elements they use add dynamism to their content and make it more engaging for the audience. However, visuals selected blindly or randomly can often lead to controversies, misrepresentations, or other issues.

“On November 7, 2024, the ships CMS Pəhləvan, CMS İgid, and CMS-3, operated by the Azerbaijani branch of Caspian Marine Services B.V. and sailing under the state flag, were forced to enter Eritrean territorial waters due to worsening weather conditions during their voyage from the Suez Canal toward Abu Dhabi, United Arab Emirates (Vahid, 2025).”

This news was widely circulated across Azerbaijani media, and even the Ministry of Foreign Affairs of Azerbaijan issued an official statement regarding the incident.

Meanwhile, some websites, prioritizing visual content, use random ship photos from their archives in related news materials. In this case, some media outlets that initially reported the incident mistakenly shared photos of ships belonging to the “Azerbaijan Caspian Shipping Company” CJSC (ASCO).

ASCO’s press secretary, Mehman Mehdiyev, immediately responded to this inaccuracy on his social media platform, addressing journalists with the following message:

“Yesterday’s news about a ship being detained off the coast of Africa once again highlighted how negligence can occur in the visual accompaniment of news. Although the detained ship has no affiliation with ASCO, unfortunately, some media outlets added images of ASCO ships operating in the Caspian Sea to their reports.

First and foremost, I must say that in such cases, we receive numerous messages of concern from sailors and their families. Just like false information, inaccurate visuals also cause confusion among them.”

Mehman Mehdiyev contacted the original source that published the news and succeeded in having the photo replaced. However, another issue reveals that Mehdiyev also pointed out, since the news had already been republished across multiple websites, it was not possible to reach all of them at once, and some sites continued to display the incorrect image.

Several important points emerge from this incident:

The websites that shared incorrect visuals violated basic journalism principles, they published a photo without verifying its authenticity. Their approach was also harmful and irresponsible. Journalistic codes of ethics emphasize that journalists should avoid publishing news that could damage individuals’ lives or cause psychological distress. The core ethical principle of humanity and compassion was clearly ignored.

This mistake evidently caused significant concern among many families of ASCO employees, who contacted the company to inquire about the fate of their loved ones reportedly at sea. In short, due to the incompetence of some media outlets, several families experienced unnecessary psychological stress.



Fig. 3. Azerbaijan Caspian Sea Shipping Company" (ASCO) ship

Source: *Qafqazinfo.az* (2025)

Let's take another look at the statement shared by the press secretary of "Azerbaijan Caspian Shipping Company" CJSC, Mehman Mehdiyev, on his social media platform regarding this issue. He emphasized that this is not the first time such an incident has occurred, in fact, it happens quite frequently.

In short, every time an incident involving ships takes place, some media representatives include photos they find online in their reports without any verification. Mehman Mehdiyev reminded journalists that this approach, ignoring the ship's company, country of origin, or type, violates the fundamental principles of journalism. On his page, he made the following public call to journalists and media organizations:

If there is no actual photo available for the subject, be sure to label the image as "symbolic photo" or "archive image." Before publishing any material related to a ship, piece of equipment, or incident, contact official sources to verify the information. Visual elements enhance the importance of news, but incorrect visuals can undermine its meaning and accuracy.

Let's not forget: a professional approach not only strengthens public trust in information but also helps preserve the media's credibility.

As this incident illustrates, visual literacy among journalists has increasingly come into question in recent years, with a noticeable rise in errors. Media professionals must adhere to ethical standards when producing and sharing visual content. The concept of Digital Visual Literacy (DVL) demands that every journalist and media outlet make ethically sound decisions in this regard. This is especially critical when covering sensitive topics, such as vulnerable communities, criminal incidents, or similar delicate matters.

As digital platforms continue to evolve, so too will the role of visual content. In the future, Digital Visual Literacy will become an essential skill for understanding emerging technologies like virtual reality and AI-generated visuals. Both media professionals and consumers will increasingly rely on DVL to navigate this evolving media landscape. In this parallel, it is no coincidence that the images in a news story can convey information and ideas to critical-minded students, and this basic knowledge of visual literacy allows them to gather the information and ideas contained in an image, place them in context, and determine whether they are valid before they can proceed to the next level of producing their own visual content (Jhaveri, 2010).

Corollary, digital visual literacy is the digital form of visual literacy and modern form of it. Beyond doubt relevant keywords "technology literacy," "digital literacy," and "visual literacy" were employed in a search query conducted on the Web of Science database to identify the academic domains focusing on research related to the subject. It also reveals the importance and development of considered perception for today and the future.

This study shows something pretty clear: digital visual literacy, DVL for short isn't just a nice skill in today's Azerbaijani media. It's essential, and honestly, the same goes for media everywhere. The problem? Even with all the tech advances, people still struggle to judge visuals critically. The core issue hasn't changed.

When you look closer, it's obvious this isn't just about technology. The real problem is built into the system. Big newsrooms in Azerbaijan often don't have graphic designers, their workflows are outdated, and everyone feels rushed to get the news out first. So, there's barely any time to check if an image or video is real or fake. That leads to more stories using old photos or random images from the internet. In the end, that chips away at both accuracy and ethics.

You can see the same pattern around the world. Researchers like Weikmann and Lecheler (2023) point out that visual disinformation spreads much faster than misinformation in text, no surprise, considering how the ASCO incident played out. Wrong visuals can bounce through news outlets before anyone gets a chance to fix things. And Messaris (1994) adds that most people don't even notice when visuals are manipulated, which puts even more responsibility on journalists to get it right. What makes the Azerbaijani situation trickier is the lack of training and education in DVL. Journalists just aren't getting the opportunities to learn better skills.

The consequences here are real. Without strong DVL skills, journalists can end up spreading misinformation by accident. That erodes public trust, and sometimes it even hurts people directly, as families of ASCO employees experienced firsthand. So, building up DVL shouldn't be seen as just another technical box to check. It's part of what makes journalism trustworthy. Adding visual literacy to journalism classes and running regular newsroom training would help prevent these kinds of mistakes.

Of course, this study has its limits. It's mostly descriptive and relies on what's already public, not new data. There's still a lot to learn. Future research can dig into how people in Azerbaijan actually read visual content, how common visual misrepresentation really is, or what happens when AI-generated images and deepfakes get mixed in.

All in all, the message is pretty urgent: Azerbaijani media needs stronger digital visual literacy, and fast.

Conclusion. Modern media is filled with images, videos, infographics, and other visual formats. Digital Visual Literacy (DVL) enables audiences to critically understand and interpret these visuals. It helps them recognize bias, intent, and key messages embedded in visual content.

Being able to identify visual bias involves recognizing techniques such as color psychology and photo editing, and understanding how visuals influence thoughts and behaviors. Today, many professional journalists still struggle to recognize visual bias, which highlights the need for ongoing improvement in their knowledge of digital tools. As digital tools become more accessible, the ability to create impactful visuals has become a vital skill. Therefore, the following recommendations are proposed at the conclusion of this research:

Media organizations should conduct training sessions and workshops on visual media literacy for journalists.

Courses on visual literacy should be integrated into journalism faculties and taught in a structured, systematic way.

In the process of developing Digital Visual Literacy, journalists use a wide range of tools to create, analyze, and verify images, videos, and other visual content effectively. These include:

Editing tools: Adobe Photoshop, GIMP, Canva

Video editing tools: Adobe Premiere Pro, Final Cut Pro, iMovie

Verification tools: InVID, TinEye, Google Reverse Image Search, FotoForensics

Data visualization tools: Tableau, Google Data Studio, Infogram

Fact-checking tools: PolitiFact, and others

It's important to note that new tools are constantly emerging. That's why media professionals and organizations must stay actively engaged in the digital world, otherwise, they risk falling behind the competition or making serious errors in digital visual literacy.

Eventually, digital visual literacy is more important than before because of several reasons. People could be convinced in term of manipulation in the context of interest. The development of digital visual literacy of population especially in Azerbaijan is a serious issue for the prevention to the dangerous occurrence and their own protection. Meanwhile, technologically globalized world requires an awareness society for improvement of their understanding. It is also connected with being a strong persona in society.

Certainly, this phenomenon – digital visual literacy and its standards would be changed. This consists of modern complications and technological developments, and also about the new threat factor.

In conclusion, digital visual literacy is an essential skill in today's media-saturated environment, enabling individuals to critically interpret and evaluate visual content. Continuous training and education for journalists are vital to ensure they can recognize bias, use digital tools effectively, and maintain professional standards. As technology evolves, new tools and methods for creating, analyzing, and verifying visuals will continue to emerge, requiring ongoing adaptation. Developing digital visual literacy among the general population, particularly in regions like Azerbaijan, is crucial for personal protection and fostering an informed society. Ultimately, embracing and advancing digital visual literacy strengthens both individual agency and societal resilience in a technologically globalized world.

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